

ABSTRACT OF THE DISCLOSURE

A coin inspection method and apparatus capable of inspecting coins having different materials and surface patterns with high accuracy by a simple coil arrangement. An exciting coil is arranged in the vicinity of one side of a coin passage inclined at a predetermined angle so that two magnetic poles thereof face the coin passage. Two receiving coils having substantially identical characteristics are arranged in the vicinity of the same side of the coin passage so that the receiving coils are electromagnetically coupled with the exciting coil. The exciting coil is excited at a predetermined frequency and an oscillation voltage of the exciting coil is detected. Also, an influence of a reactive magnetic field produced by eddy current induced on a surface of the coin is detected by the receiving coil. Material of the coin can be determined based on the oscillation voltage level of the exciting coil. The degree of the reactive magnetic field differs depending on a difference in surface irregularity of the coin, so that the coin can be discriminated based on the difference in irregularity. The apparatus is simple in construction and thus manufacturable at low cost.